

CLAIMS

1. A method in a computer-based environment for preparing content to be deployed on a target wireless device, comprising:
 - provisioning the content for the target device;
 - verifying that the device supports execution of the content by comparing the device capabilities to the content requirements; and
 - providing the verified and provisioned content.
2. The method of claim 1, further comprising causing the prepared content to be downloaded to the target device over a wireless transmission medium.
3. The method of claim 2 wherein the content is requested by a subscriber of a carrier to the computer-based environment over a wireless transmission medium.
4. The method of claim 1 wherein the provisioning comprises at least one of:
 - inspecting the content;
 - optimizing the content; and
 - instrumenting the content.
5. The method of claim 4, the inspecting further comprising at least one of:
 - determining whether the content contains malicious code;
 - determining whether the content contains banned code; and
 - determining whether the content contains designated API.
6. The method of claim 5 wherein the API is at least one of packages, classes, methods, and fields.

7. The method of claim 4 wherein the inspecting is performed using an application filter.

8. The method of claim 7 wherein the application filter specifies a list of criteria to be filtered and a target.

9. The method of claim 8 wherein the criteria is an API.

10. The method of claim 8 wherein that target is at least one of a specified client, device type, content identifier, and global definition.

11. The method of claim 4, the optimizing further comprising at least one of:
reducing the size of variable names;
modifying instructions to more efficient instructions; and
removing unused code.

12. The method of claim 4, the instrumenting further comprising inserting code that implements at least one of a billing policy, a usage policy, a notification, and an automatic content update mechanism.

13. The method of claim 4 wherein the instrumenting is accomplished at a byte-code level of content examination.

14. The method of claim 1 wherein the provisioning provides code to support billing policies.

15. The method of claim 14, the billing policies further comprising at least one of subscription based billing, trial use, download based billing, transmission based billing, and prepaid billing.

16. The method of claim 14 wherein the billing policies are provided by a wireless carrier infrastructure.

17. The method of claim 1 wherein the content is provisioned for a requestor, and the verifying further comprising at least one of:

comparing the API used by the content to the API supported by the target device;
determining whether the requestor is authorized to use the content; and
determining whether the content is banned.

18. The method of claim 17 wherein determining whether the requestor is authorized determines whether the requester has sufficient funds in a prepaid billing account to use the content.

19. The method of claim 1 wherein the verification is accomplished using profile management.

20. The method of claim 19 wherein the profile management defines profiles for at least one of a subscriber, device type, and content.

21. The method of claim 1 wherein the content is Java-based.

22. The method of claim 1 wherein the environment is integrated with a wireless carrier infrastructure.

23. The method of claim 1 wherein the content preparation provides walled-garden provisioning.

24. The method of claim 1, the computer-based environment including a network, wherein the provisioning supports the designation of the content to be prepared through browsing to a location on the network.

25. The method of claim 1 wherein the network is the Internet.

26. The method of claim 1 wherein the preparation process takes into account preferences of a requester of the content.

27. The method of claim 1 wherein attributes that control the provisioning are specified through website administration.

28. The method of claim 1 wherein attributes that control the verification are specified through website administration.

29. The method of claim 1 wherein the content contains at least one of text, graphics, audio, and video.

30. A network-based transmission medium containing content that has been provisioned and verified specifically for a target wireless device.

31. The transmission medium of claim 30 wherein the content is transmitted to the target wireless device.

32. The transmission medium of claim 30 wherein the provisioned content has been at least one of inspected, optimized, and instrumented.

33. The transmission medium of claim 32 wherein inspected content has been inspected to determine that it does not contain specified code, API, or other criteria.

34. The transmission medium of claim 32 wherein the inspected content has been inspecting using dynamically specifiable application filters.

35. The transmission medium of claim 34 wherein the application filters specify a list of criteria to be filtered and a target.

36. The transmission medium of claim 32 wherein the instrumented content contains code to implement at least one of a billing policy, usage policy, notification, and automated content update mechanism.

37. The transmission medium of claim 32 wherein the instrumented content has been instrumented at the byte-code level.

38. The transmission medium of claim 30 wherein the provisioned content contains code to automatically implement a billing policy for the content.

39. The transmission medium of claim 30 wherein the content has been verified by determining at least one of a user of the target device is authorized to receive the content, the target device supports the API used by the content, and the content has not been banned.

40. The transmission medium of claim 30 wherein the content has been verified by comparing aspects of the content to stored profiles.

41. The transmission medium of claim 30 wherein the network is connected to a wireless carrier infrastructure.

42. The transmission medium of claim 30 wherein the content is Java-based.

43. The transmission medium of claim 30 wherein the network is the Internet.
44. The transmission medium of claim 30 wherein the content contains at least one of text, graphics, audio, and video.
45. A computer-readable memory medium containing instructions for controlling a computer processor to prepare content for deployment on a target device, by:
provisioning the content for the target device; and
verifying that the target device supports execution of the provisioned content without executing the provisioned content on the device.
46. The computer-readable memory medium of claim 45 wherein the target device is a wireless device.
47. The computer-readable memory medium of claim 45, wherein the instructions further comprise causing the prepared content to be downloaded to the target device over a wireless transmission medium.
48. The computer-readable memory medium of claim 45, the provisioning further comprising at least one of:
inspecting the content;
optimizing the content; and
instrumenting the content.
49. The computer-readable memory medium of claim 48, the inspecting further comprising at least one of:
determining whether the content contains malicious code;
determining whether the content contains banned code; and
determining whether the content contains designated API.

50. The computer-readable memory medium of claim 48 wherein the inspecting is performed using an application filter.

51. The computer-readable memory medium of claim 48, the instrumenting further comprising inserting code that implements at least one of a billing policy, a usage policy, a notification, and an automatic content update mechanism.

52. The computer-readable memory medium of claim 48 wherein the instrumenting is accomplished at a byte-code level of content examination.

53. The computer-readable memory medium of claim 45 wherein the provisioning provides code to support billing policies.

54. The computer-readable memory medium of claim 53, the billing policies further comprising at least one of subscription based billing, trial use, download based billing, transmission based billing, and prepaid billing.

55. The computer-readable memory medium of claim 45 wherein the content is provisioned for a requestor, and wherein the verification further comprises at least one of:
comparing the API used by the content to the API supported by the target device;
determining whether the requestor is authorized to use the content; and
determining whether the content is banned.

56. The computer-readable memory medium of claim 55 wherein determining authorization of the requestor determines whether the requester has sufficient funds in a prepaid billing account to use the content.

57. The computer-readable memory medium of claim 45 wherein the verification is accomplished using profile management.

58. The computer-readable memory medium of claim 45 wherein the content is Java-based.

59. The computer-readable memory medium of claim 45 wherein the provisioning supports the designation of the content to be prepared through browsing to a location on a network.

60. The computer-readable memory medium of claim 45 wherein the content contains at least one of text, graphics, audio, and video.

61. A computer-based content deployment system for provisioning content for a target device, comprising:

verification manager that verifies that the content is authorized and the target device supports resources needed by the content; and

provisioning manager that provisions the content according to the target device by at least one of inspecting the content, optimizing the content, and instrumenting the content.

62. The deployment system of claim 61 wherein the provisioning manager further comprises at least one of:

subscriber verifier;

device verifier; and

application verifier.

63. The deployment system of claim 62 wherein the subscriber verifier determines whether a subscriber of a wireless carrier service is authorized to use the content.

64. The deployment system of claim 62 wherein the device verifier determines whether the target device supports an API required by the content.

65. The deployment system of claim 62 wherein the application verifier determines whether the content is banned.

66. The deployment system of claim 61 wherein the target device is a wireless device.

67. The deployment system of claim 61 wherein the deployment system is integrated with a wireless carrier computer system.

68. The deployment system of claim 61 wherein instrumenting the content provides support for at least one of a billing policy, a usage policy, a notification, and an automatic content update mechanism.

69. The deployment system of claim 61, further comprising:
billing manager that provides support for provisioning the content according to a billing policy.

70. The deployment system of claim 69 wherein the billing policy is one of subscription base billing, trial use, download based billing, transmission based billing, and prepaid billing.

71. The deployment system of claim 61 wherein the designation of the content to be provisioned is determining by browsing to a location on a network.

72. The deployment system of claim 61 wherein the content is Java-based.

73. The deployment system of claim 61 wherein the content contains at least one of text, graphics, audio, and video.